able habitats, and is, for that reason, restricted to the unfavorable, sparsely populated, boreal bog, just as the boreal plants and animals are confined to these relict islands throughout the transition and the northern parts of the Upper Austral zones. These rivals would probably not be other shells in the case under consideration, as *Circinaria* is the only snail in the region that is mainly carnivorous in habits, but would probably be some of the carnivorous arthropods.

The shells themselves show the influence of poor conditions as they are, thin, fragile, and dwarfed. The largest specimen collected, which was a shell of four and one-half whorls measures: greater diameter 11.9 mm., lesser diameter 10.4 mm., altitude 5.3 mm., while a shell with five whorls from southern Michigan measures: 18.9 mm., 16 mm., 8.5 mm.; and a young shell of four and one-half whorls from the same region as the latter: 13.9 mm., 11.8 mm., 6.4 mm. This difference in size is even more marked in the embryonic first whorl, and the northern shells are more transparent and vitreous than the southern, have little of the latter's clouded, milky appearance, and truly resemble in texture an over-grown Vitrea. In addition, the revolving, microscopic wrinkles, which mark the typical shells over the entire upper surface but most strongly along the inner, sutural slope of each whorl, are more delicately and strongly marked in the northern form.

The question as to how this form got into this region is, at present, unanswerable, but the fact that the bog, in which it was found, lies between the Nipissing fossil beach and the present shore of Burt Lake is at least interesting in this connection.

## RUMINA DECOLLATA IN MOBILE AND NEW ORLEANS.

## BY. HERBERT H. SMITH.

This species is common in Southern Europe and has been carried by commerce to Bermuda, Havana and other places. As far as I know, the only recorded North American locality is Charleston, S. C., where it has been fully naturalized for many years. For its discovery in Mobile and New Orleans we are indebted to Mr. L. H. McNeill, of the former city. This gentleman sent to me a drawing of the shell, stating that he had first noticed it in New Orleans as

early as 1907,¹ and subsequently found it common in Mobile. Mr. McNeill is interested in shells and had collected them with the late Dr. Charles Mohr: he did not remember seeing this species in the Mohr cabinet or elsewhere, and asked me for information. The drawing, though he apologized for it, was so good as to leave little doubt in my mind; moreover, Mr. McNeill stated that the shells were always decollate; and, from their occurrence in the older or French parts of the two cities, he believed them to be introduced.

At my request he took the trouble to gather and forward more than 100 living specimens; and a few days after, he sent some dead but good shells which he had brought from New Orleans. These are like Charleston or Bordeaux specimens. Mr. McNeill's notes are so good that I gladly transcribe them:

"The Mobile specimens were gathered at the S. E. corner of Monroe and Royal Sts. Another location is the S. E. corner of St. Emanuel and Canal Sts. Both are in the oldest parts of the town, and the first on the site of old Fort Charlotte (Fort Conde of the French;) there were dozens of them crawling across the sidewalk, it being a damp and cloudy day, and many had been crushed by pedestrians. The shell is found over quite a large area of the city."

With regard to the New Orleans specimens he writes: "I noticed them first while putting up a building on the uptown side of Jackson Ave., two doors towards the river from Prytania St., and afterwards in other locations, including Girod and Claiborne Cemeteries. I also saw a gardener destroying several of them, remarking that they were a pest among the violets, which suggests that they are well known all over the city."

These exact locality notes are interesting. In Mobile, at least, the snail appears to be common only in the older or French streets, and probably that is why so large a species has been overlooked by Mohr, Showalter and other good collectors. During a recent brief visit, I collected in vacant lots where rubbish piles, stones, etc., gave plenty of shelter: snails were much in evidence, but no Rumina was seen. I was not looking for it, not knowing, at the time, that it lived in the city; but I could hardly have missed so large a species had it been at all common. These lots were in newer parts of the

<sup>&</sup>lt;sup>1</sup> After this was written and sent to press I learned that Mr. Ferriss collected *Rumina* at New Orleans, some years ago. As far as I know the fact was not published.

city, a mile or more from the French streets. Probably the species, though fully naturalized, has not extended its range so far.

All the indications are that Rumina was introduced in Mobile a century or more ago, during the French rule, and in all probability it was brought from some French port. The New Orleans race may be as old or older; both cities date from the 17th century. I shall not be at all surprised if Rumina turns up in Pensacola, another old colony; and it is more than probable that other European species may be found in these Southern cities.

## SPHAERIIDAE, OLD AND NEW.

## BY V. STERKI.

A revision, or monograph, of the North American Sphariida has been demanded for years. But the way is not clear: very much is yet to be learned with respect to many species, their interrelations, the extent of their variation, and their distribution. A great deal of material for study from all over the continent is still desirable. A catalogue of the known species, with some notes will be published soon, and on the following pages will be found some descriptions and rectifications.—The numbers cited are those of the special collection of Sphariida.

Piridium abditum Haldeman, Proc. Acad. Phila., I. p. 53, 1841; Prime, Mon. Corb. 1865, p. 68.—The P. abditum muddle has been the greatest stumbling block in the otherwise difficult study of Pisidium. Beginning with T. Prime, this "species" has been the general dumping ground into which almost anything was thrown that was not plainly "a black bass or a snapping turtle," or to remain serious, any Pisidium, even such as noveboracense, variabile, aquilaterale, compressum, etc.. and occasionally Sph. occidentale.

The authentic specimens, from Lancaster Co., Pa., in the T. Prime collection are of a rather small form but serve to define the

¹They had been there for about seventy years, and remained covered with a ferruginous crust so that their real shape, surface sculpture and color could not be seen. Now they are clean. Of the seven, five are immature, of a rather small form, as noted, 2.8-3.3 mm. long, the others, two pair of valves, are 3.8-4 mm. long. The description, in Mon. Corb., is quite inadequate, even with respect to the original form: "very inequilateral" [should be inequi-